

Amendments to the Claims

1. *(Currently Amended)* An electronic device for cryptographic processing, comprising at least two electronic circuits (~~IC, CC, CP~~) coupled via a connection means, wherein the connection means is arranged for transferring data signals between the two electronic circuits, characterized by a monitoring circuit (~~401~~) arranged to monitor a deviation in the capacitance of the connection means and to generate an alert signal (~~411~~) if the deviation exceeds a predetermined value.
2. *(Original)* An electronic device for cryptographic processing according to claim 1, wherein the monitoring circuit is arranged to monitor the data signals transferred via the connection means and to compare a monitored signal with a reference signal.
3. *(Original)* An electronic device according to claim 1, wherein the electronic circuits comprise a logical circuit and a storage element arranged to store data output by the logical circuit.
4. *(Original)* An electronic device according to claim 2, wherein the monitoring circuit is a propagation delay detection circuit.
5. *(Original)* An electronic device according to claim 2, wherein the monitoring circuit is a slew-rate deviation detection circuit.
6. *(Original)* An electronic device according to claim 1, wherein the monitoring circuit is arranged to monitor a value of the capacitance of the connection means and to compare the monitored value with a reference value.
7. *(Original)* An electronic device according to claim 2, wherein the reference signal is derived from a Monte-Carlo analysis performed on the electronic device.
8. *(Currently Amended)* An electronic device according to claim 2, wherein the electronic device further comprises a dummy electronic circuit (~~405~~) having at

least a dummy connection means (409)-with a capacitance comparable to that of the connection means, and wherein the monitoring circuit is further arranged to determine the reference signal by monitoring the dummy connection means when transferring a data signal identical to that transferred via the connection means.

9. *(Original)* An electronic device according to claim 1, wherein the electronic device is further arranged to use the alert signal to power down at least a part of the electronic device.

10. *(Currently Amended)* A method for cryptographic processing, using an electronic device comprising at least two electronic circuits (~~IC, CC, CP~~) coupled via a connection means, comprising the step of transferring data signals between the two electronic circuits via the connection means,

characterized in that the method further comprises the steps of:

- monitoring a deviation in the capacitance of the connection means
- generating an alert signal if the deviation exceeds a predetermined value.